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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,576	02/01/2001	Seizo Miyazaki	Q62956	2515

7590 05/31/2005

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Washington, DC 20037-3202

EXAMINER

SY, MARIANO ONG

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,576

Applicant(s)

MIYAZAKI, SEIZO

Examiner

Mariano Sy

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 13, 14, 18 and 19 is/are allowed.
- 6) ☒ Claim(s) 15, 16, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed on April 19, 2005 has been received.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 15, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (US 5,132,856) in view of Saigusa (US 5,882,121).

Re-claims 15, 20, and 21 Takahashi disclosed, as shown in fig. 4, a bearing device comprising: an axis side member including a cylindrical part 3 with an inner ring 9 mounted externally, and an outward flange part 6 disposed on one end side in the axial direction; a housing 1 including a ring part with an outer ring 7 mounted internally, and an outward flange part disposed on the other end part in the axial direction; a rolling bearing 4 disposed between said axis side member and said housing and having an outside surface covered by said outward flange part of said axis side member; a sheet 17 covering a gap between the inner ring and outer ring and disposed externally on an endmost side of the other end part in the axial direction of the bearing device.

However Takahashi failed to disclose the sheet covering a gap between inner and outer ring and disposed externally on an extreme endmost side of the other end part in the axial direction, the sheet being bonded wherein a detachable bonding force is

Art Unit: 3683

lowerable when the bonded portion of the sheet is heated; wherein the sheet is a sealing film.

Saigusa teaches, as shown in fig. 4, the use of a sealing member 4A (sealing material 5 made of metal, rubber or plastics and the like and is not limited in the raw material therefor so far as it is provided with air tightness, see col. 3, lines 58-61) can be a sealing film that is bonded by use of adhesive, not limited to a thermo-plastic adhesive (see col. 6, lines 22-50), to the axial direction end surface of the outer ring of a bearing.

It would have been obvious to one of ordinary skill in the art would utilize the known sealing member bonded by use of adhesive to the axial direction end surface of the outer ring of the bearing of Takahashi, in view of the teaching of Saigusa, is a matter of design choice with the same intended function of attaching the sealing member to the axial direction end surface of at least one of said inner and outer rings.

It is inherent that any adhesive joint will be detachable by a force that exceed the bonding force of the adhesive or the adhesive joint is detached when subject to certain level of heat depending upon the nature or type of adhesive employed.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of Saigusa as applied to claim 13 above, and further in view of Yazaki et al. (U.S. Patent Number 5,596,235).

Re-claim 16 Takahashi as modified failed to disclose the adhesive having a predetermined detachable bonding force which is lowerable when the adhesive is subject to an ultraviolet ray irradiation.

Art Unit: 3683

Yazaki et al. teaches the use of ultraviolet ray irradiation on adhesive for curing or for detaching.

It would have been obvious to one of ordinary skill in the art to have merely utilized the known ultraviolet ray irradiation on adhesive for detaching on the sealing member of Takahashi as modified, in view of the teaching of Yazaki et al., in order to ease removing of the sealing member from the roller bearing.

5. Claims 1-10, 13, 14, 18 and 19 are allowed.

6. Applicant's arguments filed on April 19, 2005 have been fully considered but they are not persuasive.

Examiner maintains the rejection is proper.

Applicant argued in the "Remarks" on pages 6 and 7 that the above-mentioned arrangement of "the sheet 14a is exposed to outside, the sheet 14a can be easily attached", is not disclosed by Takahashi in view of Saigusa. "The sheet 14a is exposed to outside, the sheet 14a can be easily attached" in "Remarks" is not recited in claim 15.

Takahashi failed to disclose the sheet covering a gap between inner and outer ring and disposed externally on an extreme endmost side of the other end part in the axial direction, the sheet being bonded wherein a detachable bonding force is lowerable when the bonded portion of the sheet is heated; wherein the sheet is a sealing film.

Saigusa teaches, as shown in fig. 4, the use of a sealing member 4A (sealing material 5 made of metal, rubber or plastics and the like and is not limited in the raw

Art Unit: 3683

material therefor so far as it is provided with air tightness, see col. 3, lines 58-61) can be a sealing film that is bonded by use of adhesive, not limited to a thermo-plastic adhesive (see col. 6, lines 22-50), to the axial direction end surface of the outer ring of a bearing.

It would have been obvious to one of ordinary skill in the art would utilize the known sealing member bonded by use of adhesive to the axial direction end surface of the outer ring of the bearing of Takahashi, in view of the teaching of Saigusa, is a matter of design choice with the same intended function of attaching the sealing member to the axial direction end surface of at least one of said inner and outer rings.

It is inherent that any adhesive joint will be detachable by a force that exceed the bonding force of the adhesive or the adhesive joint is detached when subject to certain level of heat depending upon the nature or type of adhesive employed.

As for claim 16 Yazaki et al. teaches the use of ultraviolet ray irradiation on adhesive for curing or for detaching. Using ultraviolet ray irradiation for curing and detaching of reinforcing film is well known, also as disclosed by Makita et al. (US 5,585,224). It would have been obvious to have merely utilized the known ultraviolet ray irradiation on adhesive for detaching of the sealing member of Takahashi, as taught by Yazaki et al., in order to ease removing of sealing member from the roller bearing.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 3683

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariano Sy whose telephone number is 571-2727126.

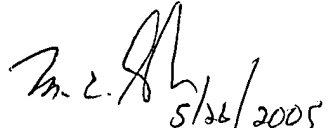
The examiner can normally be reached on Mon.-Fri. from 8:30 A.M. to 2:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci, can be reached on 571-272-7099. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 M. Sy

May 24, 2005


5/26/2005
MATTHEW C. GRAHAM
PRIMARY EXAMINER
GROUP 310